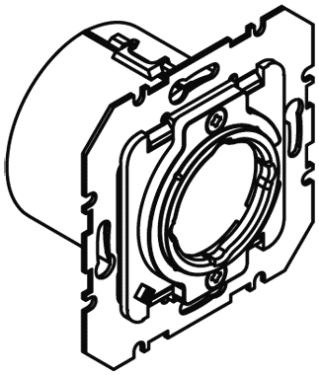
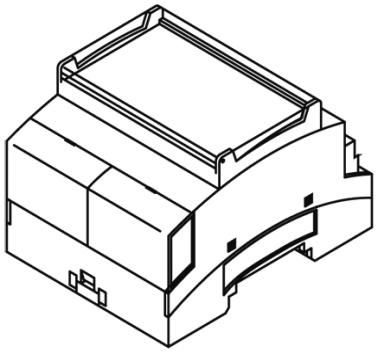
Operating instructions

Wall scanner controls multi-property
ES643x, ES644x, ES743x, ES744x





Contents

1 Introduction

About these instructions

These instructions contain important notes and information on operation of the wall scanner controls multi-property ES643x, ES644x, ES743x and ES744x.

- Read through the instructions carefully and attentively.
- Keep the instructions in a safe place and pass them on to each subsequent user of the wall scanner controls multi-property.

Explanation of the Symbols and Signal Words Used

⚠ WARNING	Indicates risks which could result in fatal or severe personal injuries.
⚠ CAUTION	Indicates risks which could result in fatal or severe personal injuries.
CAUTION	Indicates risks which could result in damage to property.
Note	Denotes information, notes and tips on optimum use of the instructions and the product.

Target group

These instructions are directed at competent personnel entrusted with the servicing, maintenance and disposal of trouble-free operation of the wall scanner controls multi-property and who has successfully completed suitable vocational training for these activities or has had the necessary appropriate experience.

OPERTIS Support

If you have any questions extending beyond the information provided in these instructions, please contact

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Up-to-date status of the information

All details on the product, images, dimensions and models correspond to the status at the time the product is delivered. We reserve the right to make changes due to technical progress and the resulting continuous improvement process to which our products are subjected.

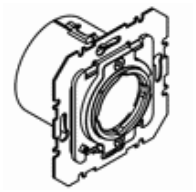
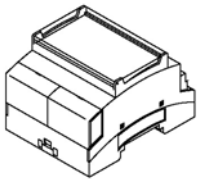
The current version of these instructions and further information is also available on our internet site www.opertis.de.

Dated 07/2013

2 Product Description

Overview

The following wall scanner controls multi-property are described in these instructions:

Art. No. / Name	Drawing
ES64xx**U**… ES74xx**U**… Wall scanner control multi-property (concealed, underplaster (flush-mounted) installation)	
ES64xx**T**… ES74xx**T**… Wall scanner control multi-property (mounting rail installation)	

Variations

Name	Function
Wall scanner control multi-property 4 ES643… ES743…	The wall scanner control can be used and managed by up to 4 different properties in parallel.
Wall scanner control multi-property 8 ES644… ES744…	The wall scanner control can be used and managed by up to 8 different properties in parallel

Functional principle

The OPERTIS eLOCK lock system ensures continuous public and commercial building fitout. Special fitting solutions are available for different door types.

A wall scanner multi-property control can be used in up to 8 different clients (lock systems) simultaneously (e.g. in jointly used entrance doors).

The wall scanner controls multi-property can be combined with different OPERTIS masking caps and housings and operated with an external power supply. In addition, external antennas can be connected.

Interfaces are available for controlling external relays and peripheral devices.

The fittings are managed and programmed, among other things issuing access authorisations, via the eLOCK Center management software.

Passive identifiers without their own power supply are available for authorisation at the fittings in the eLOCK lock system in different forms such as keys, key fobs, cards or customer-specific forms. These must be held on the wall scanner antenna for an authorisation check.

Detailed information

Further information on the product is given in Section 8 "Product Specifications".

3 Intended Use

Area of use

The wall scanner controls multi-property within an eLOCK lock system are designed to control peripheral devices, for example electric door openers, electric locks, motorised bolts, holding magnets, electrical door and gate drives, barrier systems, lifts, mailboxes, etc.

The wall scanner controls multi-property are suitable for installation in the protected internal area. The flush-mounted versions are installed in flush-mounted boxes or on the surface with special spacer frames. The mounting rail version is intended for installation, e.g.: on a mounting rail in a switch cabinet.

Condition of the product

Wall scanner controls multi-property may only be used if they are in a technically perfect condition.

Independent modifications and changes to the product are not allowed.

Ambient conditions

Use of the wall scanner controls multi-property in a particularly polluted environment, e.g. in aggressive gases or in extreme temperatures, is not allowed. If you have any questions, please contact OPERTIS Support.

Residual risk

If used properly and if the maintenance instructions are followed, this product will support your property security.

However, the following residual risks cannot be excluded:

- In the event of failure of the mains power supply there is a risk of locking in or out. In this case the door can only be opened with mechanical aids.
- In the event of failure of the electronics there is a risk of locking in or out. The door can then only be opened with mechanical aids. In this case, contact OPERTIS Support.
- If a wall scanner is used to control access to a fuse box and a fuse is defective there is risk of locking in or out. The door can then only be opened with mechanical aids.
- OPERTIS recommends use of an uninterruptible power supply (UPS) to ensure operation of the wall scanner controls multi-property during a power failure.

4 Safety Instructions

The following safety instructions must be read and followed before use! OPERTIS does not accept any liability whatsoever for personal losses or injuries or damage to property caused by failure to note and follow these instructions!

WARNING

Risk of personal injuries and damage to property

There is an increased risk of injuries if the wall scanner control multi-property or connection cables are touched while the power supply is switched on (electric shock!). The wall scanner control multi-property or connected peripheral device can be irreparably damaged.
Carry out installation and maintenance work only if the power supply is switched off.

Note and observe the VDE Guidelines (VDE-0100)!

CAUTION

Risk of damage to property

Electronic components can be irreparably damaged if touched.
Note and observe the regulations and notes in the DIN EN 61340-5-2 standard!

CAUTION

Unauthorised access after installation

When delivered the wall scanner controls multi-property are in construction site mode. Access is possible with any OPERTIS identifier, even if they are not programmed.

Program the authorisations immediately after installation to prevent unauthorised access; see eLOCK system documentation software. Check time and if necessary reset.

5 Use and Operation

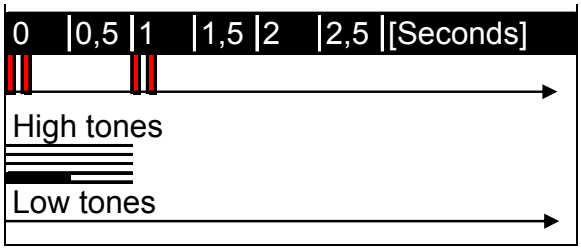
A MASTER multi-property card ES7727 (MMP) is required for starting up the wall scanner multi-property control.
The MMPs become the respective MASTER IT which teaches up to 8 clients in the wall scanner multi-property control. While a wall scanner multi-property control always only accepts one MMP, the MMP can be used simultaneously at several wall scanner multi-property controls, it is not tied to one wall scanner.

A differentiation is made between primary and secondary clients taught in a wall scanner multi-property control via the MASTER IT. The primary client can use all the functions of the eLOCK management concept without any limitations. The following functions are **NOT** available for the secondary client:

- Transfer and use fitting time profiles
- Switch IT function

A differentiation is made between primary the MASTER IT (P-MASTER) and secondary MASTER ITs (S-MASTERs), analogous to the client status.

Visual and acoustic signals are emitted for the following actions for starting up the wall scanner multi-property control. If an action / a step cannot be carried out correctly the following signal is given:

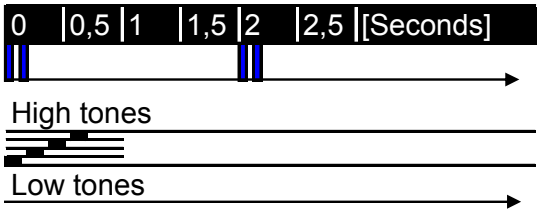
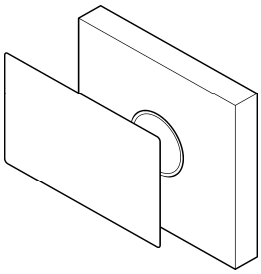
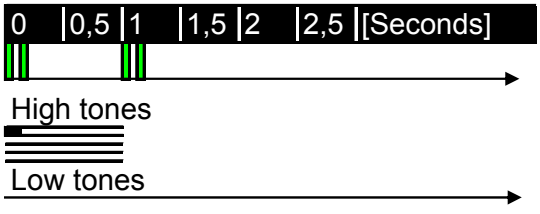
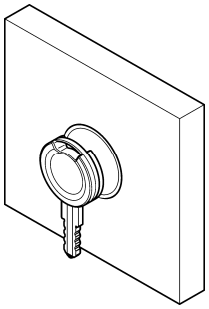


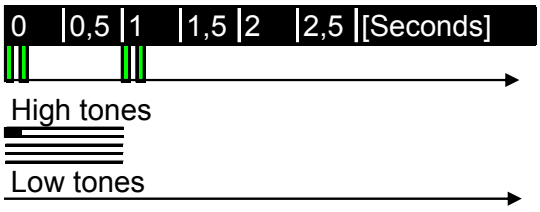
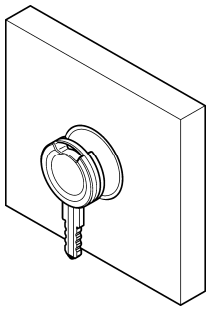
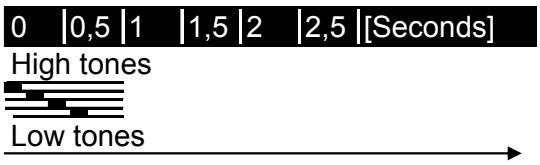
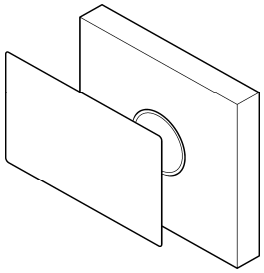
In this case the cause of the error must be found and the action / step must be repeated.

Assign MMP and P-MASTER

Assignment of the MMP and P-MASTER is necessary to perform the programming of the wall scanner multi-property control. Only one MMP or one P-MASTER only can ever be assigned, and only these are accepted by the wall scanner multi-property control.

Proceed as follows:

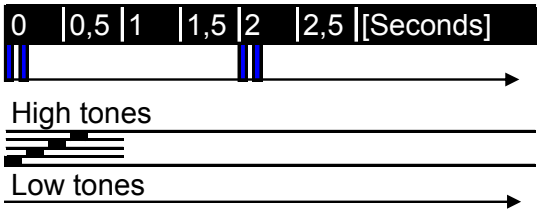
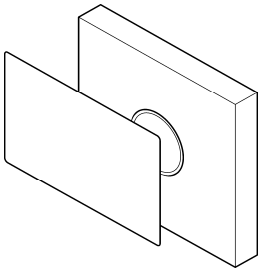
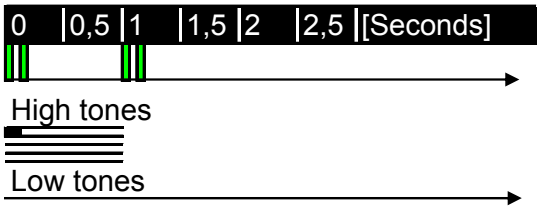
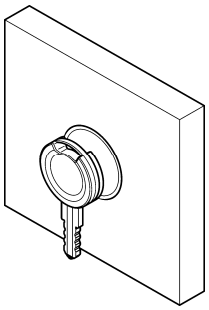
Step	Activity	Figure
1	Hold the MMP in front of the wall scanner multi-property antenna. **Signalling:** Wall scanner in multi-property programming mode 	
2	Hold the MASTER IT in front of the wall scanner multi-property antenna. **Note** The first MASTER IT assigned automatically becomes the P-MASTER. **Signalling:** MASTER IT assigned. 	

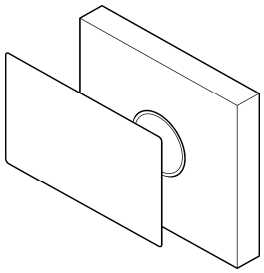
Step	Activity	Figure
3	Optional: Hold one or several additional MASTER ITs, one after the other, in front of the wall scanner multi-property antenna. **Note** These MASTER ITs become S-MASTERS. **Signalling:** MASTER IT assigned. The signalling is emitted separately for each MASTER IT held in front of the wall scanner. 	
4	Hold the MMP in front of the wall scanner multi-property antenna. **Note** If the programming is not ended with step 4, the changes in steps 1 to 3 are not accepted. **Signalling:** Closing multi-property programming mode 	

Assigning S-MASTERS

Assigning further MASTER ITs as S-MASTERS is necessary to enable the wall scanner multi-property control to be used in the respective corresponding clients. S-MASTERS can only be assigned if a P-MASTER has already been assigned.

Proceed as follows:

Step	Activity	Figure
1	Hold the assigned MMP in front of the wall scanner multi-property antenna. **Signalling:** Wall scanner in multi-property programming mode 	
2	Hold one or several not yet assigned MASTER ITs, one after the other, in front of the wall scanner multi-property antenna. **Note** If a P-MASTER has not yet been assigned the first taught MASTER IT automatically becomes the P-MASTER **Signalling:** MASTER IT assigned. The signalling is emitted separately for each MASTER IT held in front of the wall scanner. 	

Step	Activity	Figure
3	Hold the MMP in front of the wall scanner multi-property antenna. **Note** If the programming is not ended with step 3, the changes in step 2 are not accepted. **Signalling:** Closing multi-property programming mode 0 | 0,5 | 1 | 1,5 | 2 | 2,5 | [Seconds] High tones Low tones	

Deleting a P-MASTER or S-MASTERS

To delete a P or S-MASTER, the wall scanner must be deleted in the corresponding clients and then the resulting depersonalisation job of the client must be carried out at the wall scanner. This automatically removes the MASTER IT from the list of assigned MASTER-ITs. When a P-Master is deleted a new P-Master must then be assigned, see Changing a P-MASTER.

Deleting an MMP

To delete an MMP, it must be replaced by a new MMP. However, if all the MASTER ITs of a wall scanner multi-property control are deleted, the assigned MMPs are automatically deleted also.

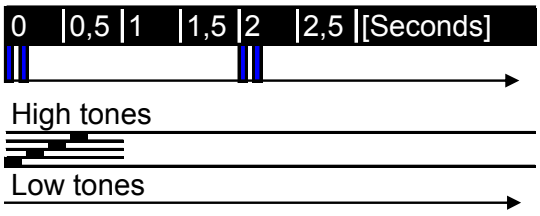
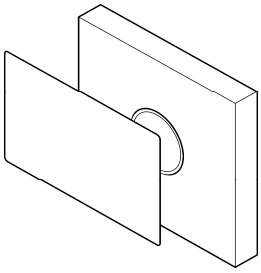
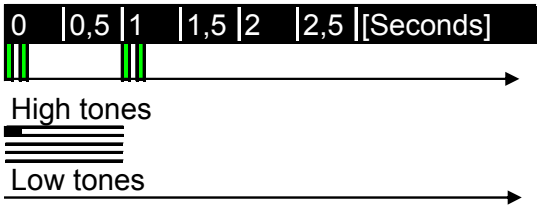
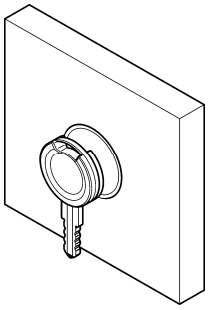
Changing a P-MASTER

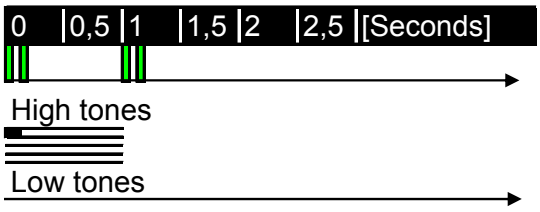
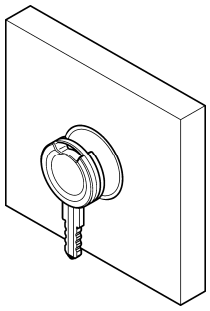
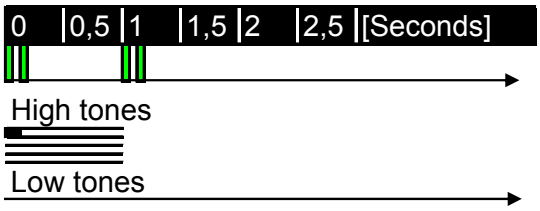
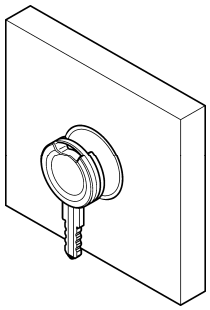
Changing a P-MASTER must be confirmed by all existing S-MASTERS. The new P-MASTER can be both an existing S-MASTER and a previously unassigned MASTER IT

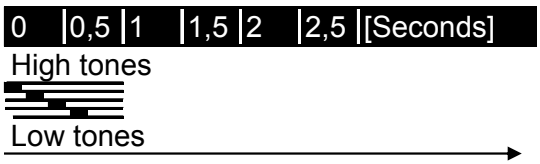
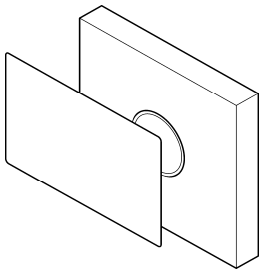
Note

If the P-MASTER used to date is not to be assigned as an S-MASTER either in the future, it must be deleted first (see above: Deleting a P-MASTER

Proceed as follows:

Step	Activity	Figure
1	Hold the MMP in front of the wall scanner multi-property antenna. **Signalling:** Wall scanner in multi-property programming mode 	
2	Hold the MASTER IT in front of the wall scanner multi-property antenna. **Note** The first MASTER IT assigned automatically becomes the new P-MASTER. **Signalling:** MASTER IT assigned. 	

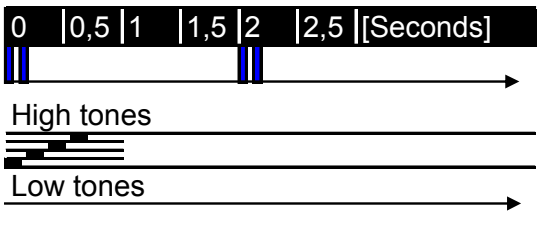
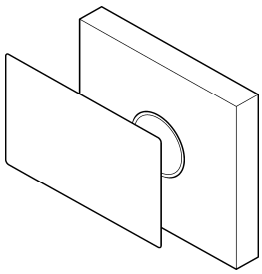
Step	Activity	Figure
3	Hold all S-MASTERS already assigned under the previous P-MASTER in front of the wall scanner multi-property antenna, one after the other. **Note** If the new P-MASTER was already assigned as an S-MASTER under the previous P-MASTER it does not have to be held in front of the wall scanner again now. **Signalling:** S-MASTER identified. The signalling is emitted separately for each S-MASTER held in front of the wall scanner. 	
4	If the previous P-MASTER was not deleted in advance, it must now be created as an S-Master and held in front of the wall scanner multi-property antenna. **Signalling:** MASTER IT assigned. 	

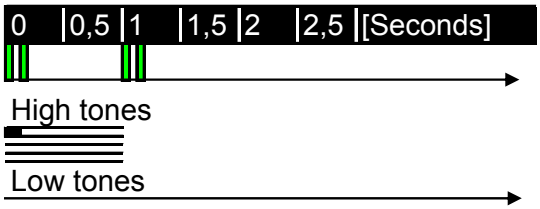
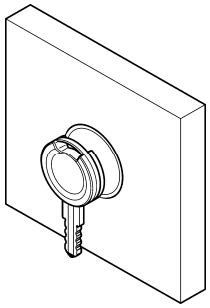
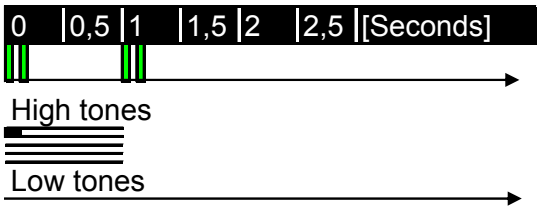
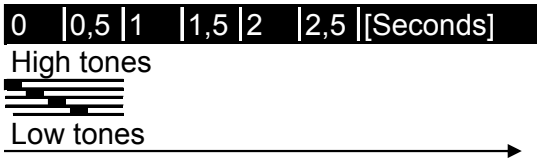
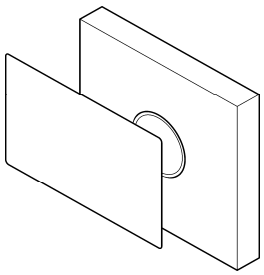
Step	Activity	Figure
5	Hold the MMP in front of the wall scanner multi-property antenna. **Note** If the programming is not ended with step 5 or all the necessary MASTER ITs are not held in front of the wall scanner, the changes in steps 1 to 4 are not accepted. **Signalling:** Closing multi-property programming mode  	

Changing an MMP

Changing an MMP must be confirmed by all existing P and S-MASTERS. The MMP to date is not required for this procedure.

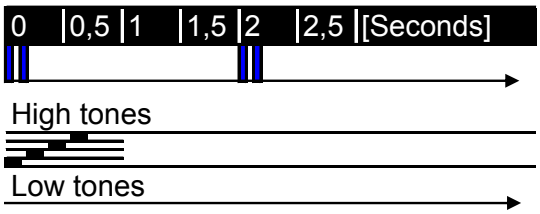
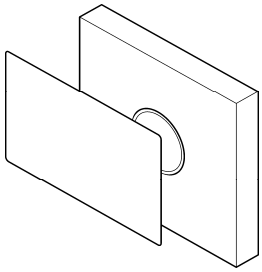
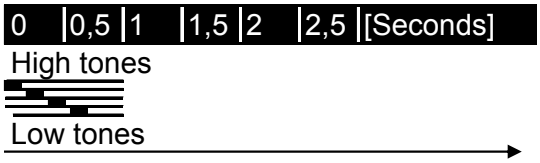
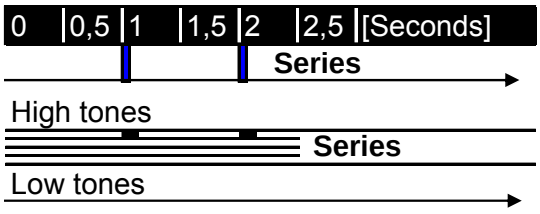
Proceed as follows:

Step	Activity	Figure
1	Hold the new MMP in front of the wall scanner multi-property antenna. **Signalling:** Wall scanner in multi-property programming mode  	

Step	Activity	Figure
2	Hold the current P-MASTER in front of the wall scanner multi-property antenna. **Signalling:** P-MASTER identified. 	
3	Hold the current S-MASTER in front of the wall scanner multi-property antenna. **Signalling:** S-MASTER identified. The signalling is emitted separately for each S-MASTER held in front of the wall scanner. 	
4	Hold the MMP in front of the wall scanner multi-property antenna. **Note** If the programming is not ended with step 4 or all the MASTER ITs are not held in front of the wall scanner, the changes in steps 1 to 3 are not accepted. **Signalling:** Closing multi-property programming mode 	

List number of free S-MASTERS

Proceed as follows:

Step	Activity	Figure
1	Hold the MMP in front of the wall scanner multi-property antenna. **Signalling:** Wall scanner in multi-property programming mode 	
2	Hold the MMP in front of the wall scanner multi-property antenna again. **Signalling:** Closing multi-property programming mode  The number of free S-MASTER slots is output visually and acoustically by the corresponding number of signals. **Signalling:** 	

Programming fittings and identifiers

Fittings and identifiers are programmed using the eLOCK Center management centre or the eLOCK AddDelete system.

Detailed information on this is given in the eLOCK system documentation software.

Active extension of the fitting opening time

If an authorised identifier is held in front of the wall scanner for longer than the defined fitting opening time, the wall scanner or the connected peripheral device remains activated until the authorised identifier is removed.

Acoustic and visual signals

The acoustic and visual signals of the connected wall scanner antenna depends on the programming. The programmed fittings in the AddDelete system and the fittings programmed using eLOCK Center have a different signalling concept.

Note

The complete visual and acoustic signals are included in the eLOCK system documentation "Signalling Concept" section.

The wall scanner antenna emits acoustic and visual signals for certain system states and events:

Visual signal	Acoustic signal	Meaning
red flashing	-	Wall scanner ready for use.
2x short blue-blue	1x ascending sound sequence	Programming mode or multi-property programming mode on.
blue flashing	-	Programming mode or multi-property programming mode active.
–	1x descending sound sequence	End of programming mode or multi-property programming mode
2x short green-green	1x short high-pitch	Wall scanner connection by authorised identifier
2x short red-red	1x long low-pitch	No wall scanner connection, identifier not authorised
2x red-green	1x short high-pitch	Wall scanner connection in construction site mode or permanent release mode, see eLOCK system documentation "Fitting Modes" section.
2x short red-red 4 x yellow	1x long low-pitch+ 4x short low-pitch	System error! Dismantle wall scanner, contact ES Support!

Important information

During communication between a wall scanner antenna and an identifier or the programming equipment (e.g. programming mode) signalling takes place at this wall scanner antenna only. All other connected wall scanner antennas are inactive for this period.

6 Servicing, Cleaning and Maintenance

The servicing, cleaning and maintenance may be carried out by qualified personnel only.

Warranty cover is excluded for damage caused by improper handling.

Intervals

Activity	Interval
Servicing	1 year

Cleaning and maintenance

Cleaning and maintenance of the wall scanner control multi-property is not necessary.

Servicing

CAUTION

Risk of locking in or out

Peripheral devices cannot be controlled without a fully functional wall scanner control multi-property and antenna.

During the functional test of the wall scanner controls multi-property and antennas it is necessary to ensure that the systems controlled by the wall scanner control multi-property do not prevent anyone from passing through.

The following functional tests must be performed once a year:

Step	Activity	Result
1	Hold an authorised OPERTIS identifier in front of the connected antenna/s of the wall scanner control multi-property.	The connected peripheral device opens for the duration of the defined opening time. The wall scanner antenna signals as specified, see section “Acrive extension of the fitting opening time”.
2	Read fitting info, check time and date, see eLOCK system documentation.	If necessary, reset time and date, see eLOCK system documentation software.

7 Problems and Solutions

Note

Problems which can occur in or due to connected components (e.g. external antennas) and the solutions are described in the respective installation instructions.

Problem	Possible cause	Solution
MMP cannot be assigned	MMP is defective.	Replace MMP.
	An MMP has already been assigned	Use existing MMP or replace with a new MMP
MASTER ITs cannot be assigned	Programming mode not closed with MMP.	Repeat procedure, close programming mode with MMP.
	Maximum number of assigned MASTER ITs reached.	Delete any MASTER ITs not required.
New P-MASTER cannot be assigned	All the assigned S-MASTERS were not held in front of the wall scanner.	Hold all assigned S-MASTERS in front of the scanner.
	The P-MASTER used to date was neither deleted in advance nor assigned as a new S-MASTER	Delete the P-MASTER used to date in advance or assign as new S-MASTER
New MMP cannot be assigned	Wrong P-MASTER used.	Use correct P-MASTER.
	All the assigned P and S- MASTERS were not held in front of the wall scanner.	Hold all the assigned P and S-MASTERS in front of the wall scanner in the correct order.
Identifier is not recognised (no positive or negative acknowledgement).	Identifier is defective.	Replace identifier.
	Wall scanner antenna is defective.	Replace wall scanner control multi-property.
	Identification attempt made at wall scanner control multi-property without internal wall scanner antenna.	

Problem	Possible cause	Solution
Identifier is not given access.	Identifier is not programmed or does not have the necessary authorisations.	Program identifier, see eLOCK system documentation software.
	Wall scanner time is incorrect.	Reset time, see eLOCK system documentation.
Peripheral device does not respond.	Wall scanner control multi-property relay is defective.	Replace wall scanner control multi-property.
	Peripheral device is off-load.	Switch on power supply to the peripheral device.
	Peripheral device is incorrectly connected.	Correct connection.
	Peripheral device is defective.	Replace peripheral device.
	Connection conductors or cables are defective.	Replace connection conductors/cables.
	Mounting rail version: "Fuse" is defective.	Replace "fuse".
Peripheral device remains activated. / Relay remains picked up.	A fitting time profile was removed from the wall scanner during the fitting opening time.	Change state of the fitting (several options): - Use switch key - Program new fitting time profile - Perform switch function for online fittings via eLOCK Center.
Wall scanner antenna has no ready signal.	Power supply is defective or is not connected.	Ensure power supply.
	Connection cable to the antenna is defective or is not connected.	Ensure connection with antenna.
	Operating voltage not within the allowable range.	Connect the correct power supply.
	Wall scanner control multi-property is	Replace wall scanner control multi-property.

Problem	Possible cause	Solution
Identifier is not given access.	Identifier is not programmed or does not have the necessary authorisations.	Program identifier, see eLOCK system documentation software.
	Wall scanner time is incorrect.	Reset time, see eLOCK system documentation.
Peripheral device does not respond.	Wall scanner control multi-property relay is defective.	Replace wall scanner control multi-property.
	Peripheral device is off-load.	Switch on power supply to the peripheral device.
	Peripheral device is incorrectly connected.	Correct connection.
	Peripheral device is defective.	Replace peripheral device.
	Connection conductors or cables are defective.	Replace connection conductors/cables.
	Mounting rail version: "Fuse" is defective.	Replace "fuse".
	defective.	
	Wall scanner antenna is defective.	Replace wall scanner antenna.
	Relay has already picked up.	Wait for relay to drop out.
Mounting rail version: Status LED of the wall scanner control multi-property is off.	Power supply is defective or is not connected.	Ensure power supply.
	Operating voltage not within the allowable range.	Connect the correct power supply.
	Wall scanner control multi-property is defective.	Replace wall scanner control multi-property.
Each identifier is authorised to lock.	Fitting is not programmed ("construction site mode").	Program fitting, see eLOCK system documentation software.

8 Product Specifications

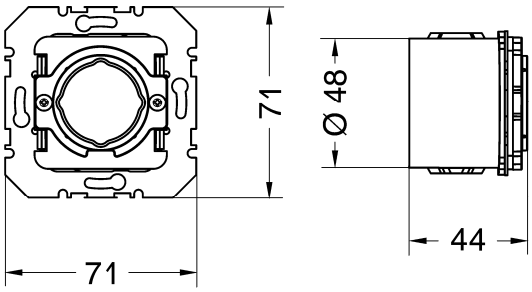
Declaration of conformity

OPERTIS GmbH herewith declares that the Wall scanner controls multi-property fulfil the basic standards and other relevant specifications of the 1999/5/EG and 2011/65/EU directives and that they are CE compliant.

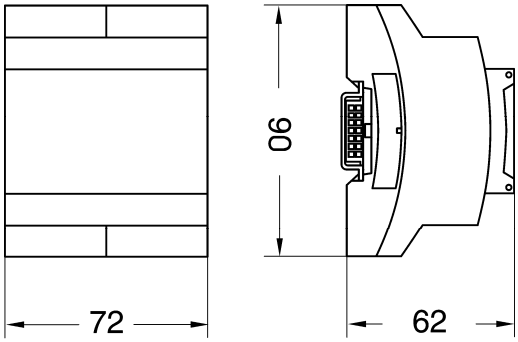
A copy of the statement of conformity can be ordered from the OPERTIS Support.

Dimensions

Wall scanner controls multi-property, concealed, flush-mounted installation



Wall scanner controls multi-property, mounting rail installation



Technical data

Installation environment for concealed, flush-mounted installation

Mounting depth	≥ 44 mm
Installation diameter	≥ 53 mm or standard concealed, flush-type boxes with 60 mm fixing centres
Mounting distance between wall scanner antennas	At least 150 mm in 3D space

Installation environment for mounting rail installation

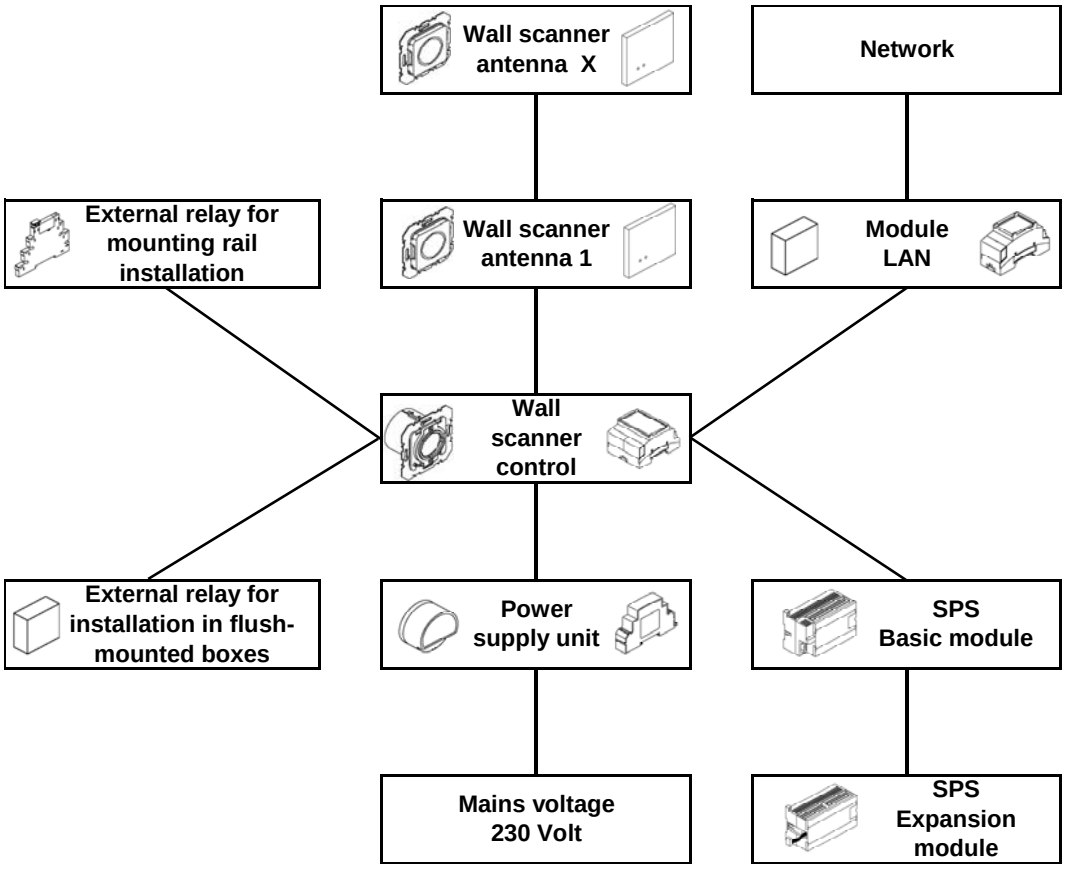
Housing	See "Dimensions" section
Mounting rail	35mm
Mounting distance between wall scanner antennas	At least 150 mm in 3D space

Power supply / connections

Power supply	Automatic recognition: - 12 - 24 V DC non-stabilised +/-10% or - 24 V AC +/-10% The wall scanner control multi-property must be supplied from a power source with limited output according to EN 60950-1:2001.
External antennas	- A maximum of 6 external antennas can be connected to a wall scanner control multi-property without internal antenna. - A maximum of 5 external antennas can be connected to a wall scanner control multi-property with internal antenna.
Power supply of the wall scanner antennas	Operation of more than 3 antennas in total via one wall scanner control multi-property is only possible with an additional external power supply, 9 V DC.
Length of the connection cable of external antennas	≤ 300m (series connection)
Power consumption	Depending on the number of connected antennas: 1 connected antenna: 1 W 2 connected antennas: 1.6 W 3 connected antennas: 2.2 W
Interfaces	- Connection for external antennas - Connection for control of a PCS system (multi-relay) - Connection for an LAN module - Connection for controlling external relays
Current input	max. 230 mA for 12VDC and with 3 connected antennas

Outputs	○ 1 relay output (Photomos, NO make contact) ○ **Concealed, flush-mounted version:** Control of the external relay ES0532U with two electromechanical changeover contacts ○ **Mounting rail version:** Control of max. two external ES0531T relays each with one electromechanical changeover contact
Switching capacity	Relay make contact/NO max. 60 V AC/DC / 2.0 A

Connection diagram



Specific data

Operating temperature	-20 °C to +55 °C		
Storage temperature	-40 °C to +85 °C		
Air humidity for operation and storage	max. 95 % non-condensing		
Degree of protection according to EN 60529	IP21		
Memory capacity in wall scanner control multi-property 4:	ES6… for ES5000 plus	ES7… for eLOCK	ES7… for eLOCK AddDelete
Identifiers	60,000	80,000	-
Protection zones (membership of a group of fittings	296	30	-
Events (authorisation attempts)	512	628	-
Memory capacity in wall scanner control multi-property 8:	ES6… for ES5000 plus	ES7… for eLOCK	ES7… for eLOCK AddDelete
Identifiers	30,000	40,000	-
Protection zones (membership of a group of fittings	296	30	-
Events (authorisation attempts)	320	281	-

9 Disposal

Product

Disposal in accordance with WEEE Directive 2012/19/EU:

- Do not dispose of product by throwing it in the local household waste.
- Return product to OPERTIS or dispose of at a municipal collection point for hazardous electrical wastes.

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